AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for ~~the~~ a damped elastic connection of two parts, the device comprising at least one set of ~~at least~~ two tubular cylindrical sleeves of viscoelastic material fitted one inside the other substantially coaxially with the interposition of a rigid cylindrical and substantially coaxial intermediate ring ~~between two contiguous viscoelastic sleeves of said set~~ so that~~, for each pair of two contiguous sleeves,~~ one of ~~the~~ said two sleeves is an internal sleeve secured~~,~~ by an internal cylindrical ~~lateral~~ face~~,~~ to an external cylindrical ~~lateral~~ face ~~facing it belonging to~~ of an internal rigid ring and~~,~~ by an external cylindrical ~~lateral~~ face ~~of said internal sleeve~~ to an internal cylindrical ~~lateral~~ face ~~facing it belonging to an~~ of said intermediate ~~rigid~~ ring separating said internal sleeve from the other sleeve of said pair of sleeves, which is an external sleeve secured, by an internal cylindrical ~~lateral~~ face, to an external cylindrical ~~lateral~~ face of said intermediate ring and, by an external cylindrical ~~lateral~~ face ~~of said internal sleeve,~~ to an internal cylindrical ~~lateral~~ face of an external rigid ring, ~~an innermost~~ said internal ring and ~~an outermost~~ said external ring ~~of said set~~ being ~~secured~~ integral, respectively, ~~to~~ with an internal armature and ~~to~~ an external armature, each of which is connected to a respective one of two connecting members for connection to said parts,

wherein, ~~for each pair of two contiguous sleeves of said set, the~~ said internal sleeve and ~~the~~ said external sleeve are made of a viscoelastic material which has a shear modulus g1 and g2 respectively, and have an axial length L1 and L2

respectively, an inside radius R1 and R2 respectively and a thickness e1 and e2 respectively, giving them a geometry such that the following formula is substantially satisfied:

$$g1 . \frac{L1}{\ln(1+\frac{e1}{R1})} = g2 . \frac{L2}{\ln(1+\frac{e2}{R2})}$$

2. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein each of two annular axial end faces of each ~~viscoelastic~~ of said sleeves is shaped as a meniscus delimited by a curved free surface with a concave side facing axially outwards, and said axial length of each sleeve is measured between bottoms of the meniscuses of said two annular end faces of said sleeve.

3. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein ~~the~~ said viscoelastic material of ~~the~~ said sleeves is an elastomer.

4. (Currently Amended) ~~A device~~ Device according to Claim 3, wherein ~~the~~ said elastomer of ~~the~~ said sleeves is a silicone elastomer with a high loss angle value as high as about 45°.

5. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein each ~~viscoelastic~~ sleeve is moulded and preloaded in compression between ~~the two~~ said rigid rings to which said sleeve is secured by ~~its~~ said internal and external cylindrical ~~lateral~~ faces of said sleeve.

6. (Currently Amended) ~~A device~~ Device according to Claim 5, wherein ~~for at least one pair of contiguous sleeves, the~~ said external sleeve is preloaded by shrink-fitting ~~the corresponding~~ said external rigid ring.

7. (Currently Amended) ~~A device~~ Device according to Claim 6, wherein said shrink-fitting of ~~the~~ said external rigid ring is brought about by plastic deformation of said external rigid ring radially inwards.

8. (Currently Amended) ~~A device~~ Device according to Claim 5, wherein ~~for at least one pair of contiguous sleeves, the~~ said internal sleeve is preloaded by radial expansion of ~~the corresponding~~ said internal rigid ring.

9. (Currently Amended) ~~A device~~ Device according to Claim 8, wherein said radial expansion of said internal rigid ring outwards is brought about by plastic deformation of ~~the~~ said internal rigid ring.

10. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein said set of ~~at least~~ two ~~viscoelastic~~ sleeves is shrink-fitted~~,~~ into said external armature, arranged as an outer sheath~~, and/or around said internal armature, of cylindrical shape~~.

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11. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein ~~the outermost~~ said external ring of said set has, at an axial end facing towards the connecting member to which said ~~outermost~~ external ring is connected, a radially thicker part to which ~~the~~ said external armature is removably connected by fixing means.

12. (Currently Amended) ~~A device~~ Device according to Claim 11, wherein ~~the outermost~~ said external ring of said set is shrunk-on by cold rolling of ~~its~~ a part of said external ring extending in line with ~~the outermost~~ said external sleeve of said set.

13. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein at least one of ~~the innermost~~ said internal and ~~outermost~~ said external rings of said set is incorporated into ~~the~~ said internal armature or external armature, respectively.

14. (Currently Amended) ~~A device~~ Device according to Claim 1, wherein said two connecting members are threaded ball ends with screw threads ~~of opposite hand, or~~ of the same hand but different pitch, each of said threaded ends being screwed into a tapped bore of one of ~~the~~ said external and internal armatures, respectively, so as to allow the axial length of the ~~connecting~~ device to be adjusted, locked locking nuts being screwed on to the threaded ends and pressed against ~~the~~ said armatures so as to fix said axial length of the ~~connecting~~ device after ~~its~~ adjustment of the device.

15. (Currently Amended) A method of manufacturing a device for damped elastic connection ~~according to Claim 1,~~ of two parts, the device comprising at least one set of two tubular cylindrical sleeves of viscoelastic material fitted one inside the other substantially coaxially with the interposition of a rigid cylindrical and substantially coaxial intermediate ring so that one of said two sleeves is an internal sleeve secured by an internal cylindrical face to an external cylindrical face of an internal rigid ring and by an external cylindrical face to an internal cylindrical face of said intermediate ring separating said internal sleeve from the other sleeve of said pair of sleeves, which is an external sleeve secured by an internal cylindrical face to an external cylindrical face of said intermediate ring and by an external cylindrical face to an internal cylindrical face of an external rigid ring, said internal ring and said external ring being integral respectively with an internal armature and an external armature, each of which is connected to a respective one of two connecting members for connection to said parts, said

internal sleeve and said external sleeve being made of a viscoelastic material which has a shear modulus g1 and g2 respectively, and have an axial length L1 and L2 respectively, an inside radius R1 and R2 respectively and a thickness e1 and e2 respectively, giving them a geometry such that the following formula is substantially satisfied

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$$g1 . \frac{L1}{\ln(1+\frac{e1}{R1})} = g2 . \frac{L2}{\ln(1+\frac{e2}{R2})}$$

the method comprising for manufacturing said at least one set of ~~at least~~ two ~~viscoelastic~~ sleeves, at least the steps consisting in :

- moulding ~~the innermost~~ said internal sleeve of said set between, on the one hand, one of said internal ~~the innermost~~ ring of said set ~~or the~~ and said internal armature and, on the other hand, ~~an~~ said intermediate ring,
- shrinking said intermediate ring so as to preload ~~the innermost~~ said internal sleeve in compression,
- moulding ~~a contiguous~~ said external sleeve around ~~the~~ said intermediate ring and between ~~the latter~~ said intermediate ring and ~~another~~ said external ring which is radially on the outside,
- shrinking said ~~other~~ external ring so as to preload said ~~contiguous~~ external sleeve in compression~~, and so on until the outermost sleeve of said set is moulded and the outermost ring of said set is shrunk.~~.

16. (Cancelled) A method of manufacturing a device for damped elastic connection according to Claim 1, the method comprising, for manufacturing said at least one set of at least two viscoelastic sleeves, at least the steps consisting in :

- moulding all the viscoelastic sleeves at the same time, using a very-high pressure moulding operation that limits the effect of the post-moulding shrinkage and precompressing the sleeves at the time of moulding,
- the innermost sleeve of said set being moulded directly on to said internal armature or on to the innermost ring of said set, and
- the outermost sleeve being moulded directly on to said external armature or on to the outermost ring of said set.

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17. (NEW) Device according to claim 1, wherein said set of two sleeves is shrink-fitted around said internal armature of cylindrical shape.